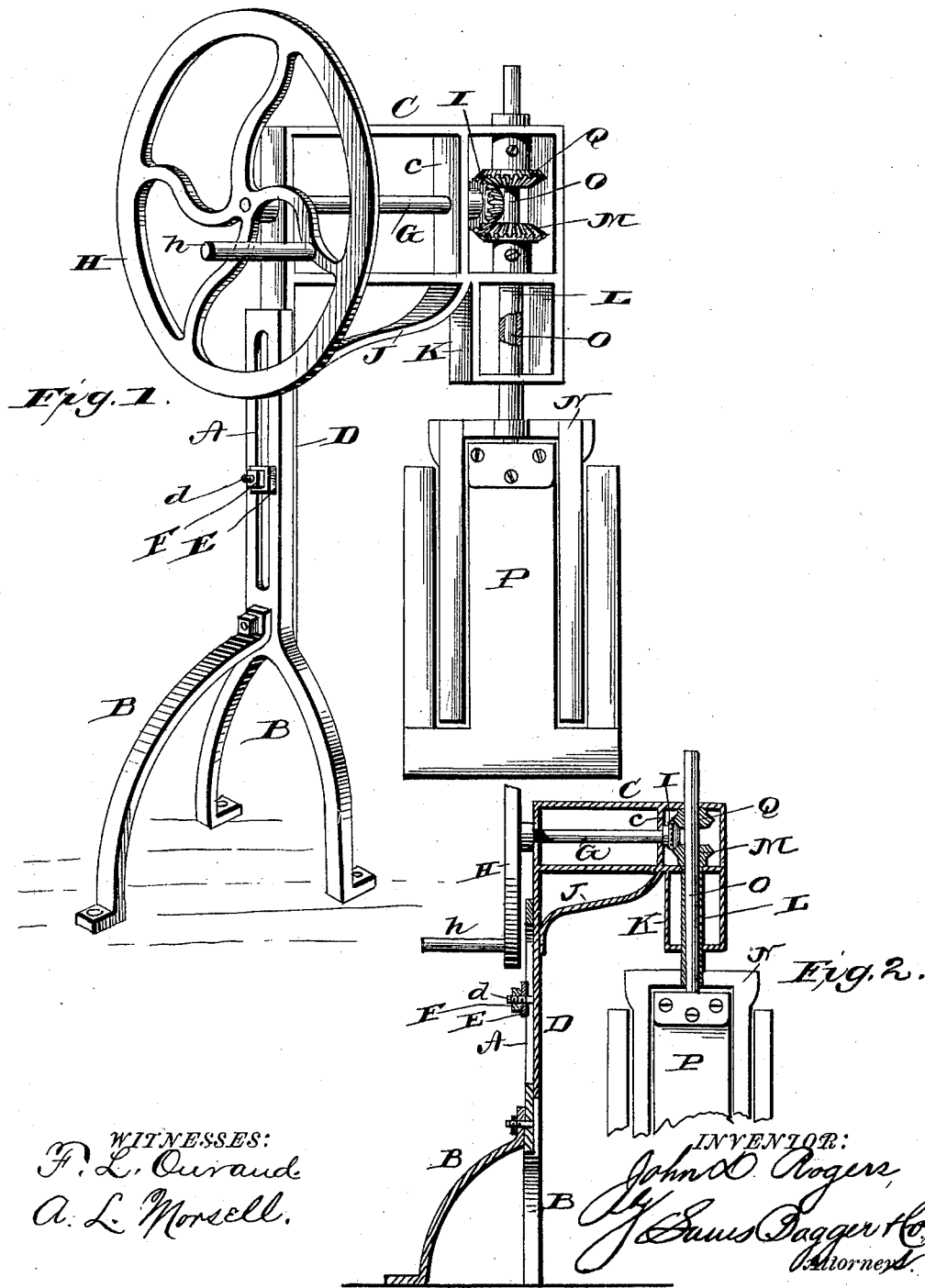


(No Model.)

J. D. ROGERS.
CHURN.

No. 419,888.

Patented Jan. 21, 1890.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN D. ROGERS, OF HOPE, ARKANSAS.

CHURN.

SPECIFICATION forming part of Letters Patent No. 419,888, dated January 21, 1890.

Application filed September 6, 1889. Serial No. 323,184. (No model.)

To all whom it may concern:

Be it known that I, JOHN D. ROGERS, a citizen of the United States, and a resident of Hope, in the county of Hempstead and State of Arkansas, have invented certain new and useful Improvements in Churns; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved churn-dasher, and Fig. 2 is a vertical sectional view.

My invention has relation to churn-dashers; and it consists more particularly in providing means whereby the several sections of the dasher may be rotated in opposite directions. Furthermore, in providing for the vertical adjustment of said dashers, whereby the device may be adapted to any-sized vessel or cream-receptacle; and, furthermore, in various other details of construction, as herein-after more fully pointed out and described.

Referring to the drawings forming part of this specification, and in which like letters of reference refer to like parts in both figures, the letter A indicates the slotted standard or upright, supported by legs B B B.

The letter C represents the gearing-frame, which is subdivided by a vertical strip *c*. This frame is provided on one side with a depending arm D, which has projecting laterally therefrom a screw-threaded stud or pin *d*, said pin or stud passing through the slotted standard and provided on its outer end with a washer and locking-nut, (designated by the letters E and F, respectively.) It will readily be observed that by this construction adjustability may be given to the gearing-frame, the same being accomplished by loosening the locking-nut and moving the depending arm of the frame either upwardly or downwardly, as desired, and then again tightening the nut.

A horizontal shaft G is journaled in the gearing-frame, the outer end thereof carrying a fly-wheel H, provided with the usual operating-handle *h*. The inner end of this shaft extends through the division-strip *c* into the

smaller division of the frame and carries a bevel-gear I.

The gearing-frame is supported by a brace J, which extends from the depending arm thereof to the bottom strip of said frame, and is further provided with a depending hanger or angular extension K. Passing through this hanger and through the bottom piece of the frame is a hollow vertical shaft L, which carries on its upper end a bevel-gear M, meshing with the gear upon the end of the horizontal shaft, and its lower end is secured to a dasher-blade N, said blade consisting of a cross-head and downwardly-extending strips secured thereto. A second vertical shaft O passes through the smaller division of the gearing-frame and thence through the hollow shaft and loosely through an aperture or hole in the cross-head of the blade N, the extreme lower end being secured to a dasher-blade P, consisting of the central inverted-T-shaped portion and the upwardly-extending arms, the depending arms of the blade N passing in between the central portion and the outer arms of said blade P, as clearly shown in the drawings. Near the upper end of the shaft O is secured a bevel-gear Q, which likewise meshes with the gear upon the end of the horizontal shaft.

From the foregoing description, taken in connection with the accompanying drawings, the operation and construction of my improved churn-dasher will be readily understood. It will be seen that when the horizontal shaft is turned to the right by means of the wheel and operating-handle the gears upon the hollow shaft and shafts passing therethrough will turn the same, respectively, to the left and right, thus causing the two paddles to be rotatable in different directions and insuring a most thorough agitation of the contents of the receptacle in which the dashers work.

For the sake of convenience I prefer to provide the lower ends of the vertical shafts, which secure the same to the paddles or dasher-blades, with right and left handed threads, thereby providing for the ready removal of the blades when required, all that is necessary being simply to hold said blades and turn the handle to the left. When it is desired to replace the dashers, the same is ac-

complished in a similar manner, with the exception of turning the handle to the right.

It is obvious that my invention may be utilized in several different ways besides as a
5 churn-dasher—for instance, as an ice-cream freezer, or as an egg-beater—and possesses the further advantage of being exceedingly simple in construction, inexpensive of production, and most thorough and efficient in
10 operation.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The herein-described churn, consisting
15 of the slotted standard, the arm adjustable in said standard, the gearing-frame on said arm having the dividing-strip and depending

angular extension, the brace for bracing the frame on said arm, the horizontal shaft carrying the bevel-gear, and the vertical shaft 20 and sleeves carrying the dashers and bevel-gears, substantially as described.

2. In a churn, the arm having the rectangular gearing-frame therein, provided with an angular depending extension, and the slot- 25 ted standard in which said arm and frame are adjustable, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN D. ROGERS.

Witnesses:

WILLIAM A. FRANKLIN,
WILLIAM WILLIAMS.